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WHAT IS CLAIMED IS:

high data rate inter-satellite communications links method comprising providing an ultrafast time hopping wireless satellite communications link in which data is transmitted using individual packets or pulses and a sequence of such packets or pulses, causing said individual packets or pulses to be short in duration so that the individual packets are pulsed and signal energy is spread over the allowed bandwidth substantially simultaneously and instantaneously.

- The invention defined in Claim 1 wherein a time 2. hopping sequential code is used to position the said packets or pulses precisely in sequence thereby providing also providing use of frequency space and optimum chamnels due to the transmission noninterfering orthogonality of the coding scheme used.
- 3. The invention defined in claim 1 wherein the ultrashort nature of the individual packets or pulses used permits the time duration of a frame to be divided into very many microintervals of time in which the signal occurs.
- 4. The invention defined in Claim 3 wherein said division into very many microintervals in a frame to permit



the availability of as many possible coding schemes as many non-interfering transmission channels.